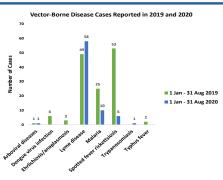
## Army Vector-borne Disease Report

## Disease Reporting System internet (DRSi) Surveillance

From 1 January 2020 to 31 August 2020, 76 vector-borne disease (VBD) cases, with onset dates during the specified time period, have been reported in the DRSi. Active Duty (AD) service members and non-AD individuals were equally affected (n=38 among both groups) and 67% (n=51) of cases were male. To date, the largest numbers of VBD cases were diagnosed among individuals who were 18-29 and 40-49 years of age; both groups each contributed 19 cases (25%).



Click image to enlarge

During the same time period in 2019, 141 cases were reported in the DRSi; this

represents a 46% decrease in the number of cases from 2019 to 2020 during the specified time period. Fifty-one percent of the cases were reported from locations in the Atlantic region and thirty-three percent were reported from Europe.

A total of nine VBD cases were reported to the DRSi in August 2020, and 67% (n=6) of the cases were males. Of the nine cases, seven (78%) were diagnosed with Lyme disease, one (11%) with malaria, and one (11%) with Spotted fever rickettsiosis (SFR). Outdoor activity/exposure to arthropods, and/or being in a woody/brushy/grassy/Lyme-endemic area prior to symptom onset were reported among all the Lyme disease and SFR cases; duty-related exposure was noted for the malaria case. During August 2019, 30 VBD cases were reported, which is more than triple the number of cases reported in August 2020.

## 2020 Year-to-Date Vector Testing

As of 28 August 2020, 14,722 mosquitoes from Public Health Command (PHC) - Central have been submitted for testing in 2020; 7,526 (51%) were tested, and 1 of 566 (0.2%) mosquito pools tested for West Nile virus was positive. As of 17 August 2020, 80 *Culex spp.* and *Culiseta spp.* mosquitoes from PHC-Europe were tested for WNV, 2 *Anopheles spp.* for malaria, and 19 *Aedes spp.* for both chikungunya and dengue viruses; no mosquitoes tested positive for any pathogen.

PHC-E submitted 645 ticks for testing as of 25 August 2020; 4/588 (0.7%) *Ixodes spp.* ticks were positive for *Anaplasma phagocytophilum*, 44/605 (7.3%) *Ixodes spp.* ticks were positive for *Borrelia burgdorferi*, and 1/36 (2.8%) *I. ricinus* ticks were positive for tick-borne encephalitis virus.

PHC-P submitted 2,832 mosquitoes from 123 pools for testing as of 6 July; mosquitoes were collected from 10 different sites across the region. Test results are not yet available.

Collection and testing volumes so far this year are low compared to previous years due to the COVID-19 pandemic. To view the vector-borne disease surveillance dashboard, visit <a href="https://carepoint.health.mil/sites/">https://carepoint.health.mil/sites/</a>

Time periods: 2019: 1 January 2019 through 31 August 2019 | 2020: 1 January 2020 through 31 August 2020.

The values shown for DRSi surveillance represent all individuals that were diagnosed at Army locations and Army beneficiaries diagnosed at non Army locations. Values are based on onset dates.

## Vector-Borne Disease Cases Reported in 2019 and 2020

